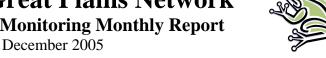# Northern Great Plains Network
Inventory and Monitoring Monthly Report
December 2005

Annual Network Meeting: The annual meeting for the Northern Great Plains I&M Network is Wednesday February 15 at the Radisson in Rapid City, South Dakota. The I&M session runs from 8:00am to late morning and is followed by EPMT and Fire Effects sessions. If you need more information contact the Network I&M Coordinator.

Technical Committee Composition: We've had changes to the Technical Committee; therefore I'm forwarding the following. Let me know if updates are needed.

Park	Representative
Agate Fossil Beds NM	Bob Manasek
Badlands NP	Brian Kenner
Devils Tower NM	Jim Cheatham
Fort Laramie NHS	Tammy Benson
Fort Union Trading Post NHS	Andy Banta
Jewel Cave NM	Rene Ohms
Knife River Indian Villages NHS	John Moeykens
Missouri NRR	Wayne Werkmeister
Mount Rushmore NMEM	Eric Nelson
Niobrara NSR	Kristy Hajny
Scotts Bluff NM	Bob Manasek
Theodore Roosevelt NP	Laurie Richardson
Wind Cave NP	Dan Roddy
NGP I&M Network Coordinator	Dan Licht (non-voting)
MWR I&M Coordinator	Carmen Thomson (non-voting)

In addition to the formal members, the NGP Fire Effects Program (Cody Wienk) and the NGP Exotic Plant Management Team (Chad Prosser) participate in many Technical Committee calls, meetings, and other activities.

1ˢᵗ Cut of Vital Sign List: The following table is the first cut of Vital Signs to be monitored by the Northern Great Plains I&M Program (i.e., it excludes those resources being monitored by park staff). The list was developed from the fall 2005 Vital Signs selection meeting and subsequent input by the parks. The list includes Network-wide priorities as well as the top park-specific needs. In the next few months the list will be submitted to WASO (along with accompanying text). When approved, it will satisfy GPRA goal Ib3A. HOWEVER, the list is not final until we submit our monitoring plan 18-24 months from now. The list will certainly change as we develop protocols, quantify sampling effort, and establish a budget (e.g., we may realize that we can cheaply monitor wombats at the same time we monitor birds). Although there will be numerous revisions between now and the final plan, those items near the top of the list will almost certainly be monitored (whereas those in the middle or bottom are more iffy). A challenge will be to meet the highest needs of the parks while being equitable across the Network.

	Description	AGFO	BADL	DETO	FOLA	FOUS	JECA	KNRI	MNRR	MORU	NIOB	SCBL	THRO	WICA
Plant Community	Plant composition and abundance will be monitored annually using plots, although not all parks and all plots will be visited every year.	X	X	X	X	X	X	X		X		X	X	X
Exotic Plant Early Warning	It's unclear what form or protocol this monitoring will consist of.	X	X	X	X	X	X	X	X	X	X	X	X	X
Water Quality	Water quality data will be collected annually, but not necessarily at all parks or all sites every year.	X	X	X	X	X	X	X	X	X	X	X	X	X
Land Cover and Use	Remote imagery will be acquired and analyzed on a periodic basis.	X	X	X	X	X	X	X	X	X	X	X	X	X
Assessment of Plant Treatments	A rapid assessment of vegetation changes at sites treated with herbicides, biocontrol, fire, or other tools.	X	X	X	X	X	X	X	X	X	X	X	X	X
Weather	Pending further analysis additional weather stations may be installed at some parks.	?	?	?	?	?	?	?	?	?	?	?	?	?
Breeding Landbirds	Tentatively identified for Black Hills parks because of collaboration potential with USFS and at KNRI because of unique issues.			X			X	X		X				X
Watershed Characterstics	Remote imagery will be periodically analyzed. (Due to the size of the watersheds imagery acquisition may not be possible or necessary, i.e., this will consist of analyzing public domain data.)	X	X	X	X	X	X	X	X	X	X	X	X	X
Ozone	Could potentially use a portable ozone monitoring device that would be rotated between parks.	X		X	X	X	X	X	X	X	X	X		
Extreme Disturbance Events	Consist of the I&M Program capturing information on extreme disturbance events (e.g., rock slides).	X		X	X	X	X	X	X	X	X	X		
Viewshed	Use of photo points to qualitatively record changes to viewsheds.	X	X	X	X	X	X	X	X	X	X	X	X	X
Soil Pesticides	A periodic sampling and analysis of soil for pesticide residues.	X		X	X									
Prairie Dogs	Annual or regular monitoring of distribution and (perhaps) density.		X									X		
Cave Climate	Using automated monitoring equipment.						X							
Deer Demographics	Annual or even seasonal estimates of density.							X						
Mussels	Annual or periodic monitoring using established plots.								X					
Specialized Plant Communities	Monitoring vegetation using plots to track changes in the community, but not to make inferences across the entire park.										X			
Bison Genetics	Periodic monitoring of bison genetics to survey for cattle introgression and other genetic characteristics.		X										X	X
Bat Community	Monitoring of abundance and composition using ultrasonic recorders.					X								
Night Sky	Very infrequent (e.g., every 10th year) monitoring of night sky.	X	X	X	X	X	X	X	X	X	X	X	X	X
Soundscape	Infrequent or ad hoc monitoring of sound using automated devices.	X	X	X	X	X	X	X	X	X	X	X	X	X